

Science & Technology · GS - III

Emerging infectious diseases pose significant challenges to global public health security. Discuss the measures required to prevent and control disease outbreaks.

EXAM YEAR

DAILY PRACTICE 24/10/2026

PAPER

GS - III

SUBJECT

Science & Technology

MARKS

10

WORD LIMIT

~150 words

Answer Hint

Epidemiological surveillance, early diagnosis, contact tracing, isolation, healthcare infrastructure, international cooperation, WHO, One Health approach.

Model Answer

Introduction:

Emerging infectious diseases can spread across geographical boundaries and place considerable pressure on public health systems. Ebola outbreaks highlight the importance of early detection and coordinated responses.

Measures for Prevention and Control

1. Early surveillance: Strengthen disease monitoring and laboratory diagnostic networks.
2. Contact tracing: Identify and monitor individuals exposed to infected patients.
3. Isolation and infection control: Ensure safe patient care and protect healthcare workers.
4. Healthcare preparedness: Provide trained personnel, protective equipment and adequate treatment facilities.
5. Public awareness: Counter misinformation and promote timely reporting of symptoms and exposure.
6. International cooperation: Facilitate information-sharing, technical assistance and coordination through the World Health Organization (WHO).

7. One Health approach: Integrate human, animal and environmental health surveillance to address zoonotic risks.

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Challenges:

Weak healthcare infrastructure, delayed reporting, misinformation and limited resources can hinder outbreak control.

Conclusion:

Early detection, effective healthcare systems and international cooperation are essential for containing infectious diseases and strengthening global health security.